

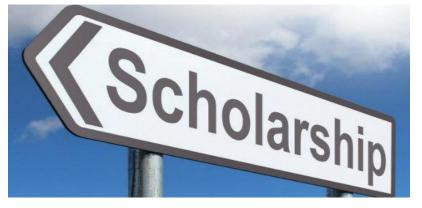
Spring 2021

Tapping into Scholarships to Help Fund Your Educational Journey

by Christine Reed, MESA Counselor/Coordinator

Students commonly ask me "How can I get scholarships?" My answer is "Make applying for scholarships as important as completing your homework. Use summer term and college breaks to attend to your scholarship homework." It takes commitment, but students who are consistent, strategic, and organized about it are commonly successful in funding their education through this valuable resource. Following is information to help students on their quest.

Why would students apply for scholarships? Scholarships help students pay for academic and living expenses, allowing them to minimize their work hours and giving them more time to focus on their academics. Furthermore, students can be more selective in how they spend their time incorporating participating in more academic related experiences, getting involved in clubs, doing independent STEM projects, and completing internships and job shadowing.

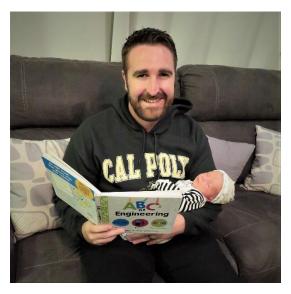


There are basically two types of scholarships. Institutional scholarships come from the college/university you are attending. Private scholarships come from foundations, businesses/companies, and charitable/non-profit organizations. Common components to the application process include a general application form, completion of the FAFSA application, a personal statement, letters of recommendation, transcripts, and an interview.

Tips when applying for scholarships include:

- Explore all your options
- Never pay money for scholarship information
- Consider local opportunities
- Don't waste time on scholarships for which you are clearly not eligible
- Be prepared to devote TIME to your search and applying
- Pay close attention to detail, especially when applying to more than one scholarship at a time
- Seek help and allow enough time to develop strong personal statements
- Think positively about yourself and the process
- Select proper people to write letters of recommendation and give them ample time to complete the task (minimum of 2 weeks)
- Follow-up and send thank you letters
- Be persistent and consistent; don't ever quit!

For more information regarding scholarships and a comprehensive list of STEM scholarships available visit the MESA/STEM Scholarship Toolkit at <u>https://www.hancockcollege.edu/mesa/Scholarship.php</u>.



That Is What I Want to Do with My Life

by Thomas Taylor, STEM Student and ENGAGE Scholar, Mechanical Engineering

Like many fortunate children, I had a nice childhood in my small town. I enjoyed hiking in the Boy Scouts, playing drums for my marching band, working on cars with my buddies - things were good. I did well in high school and set my sights on becoming an engineer. My interest in cars sparked my dream, but I knew I didn't want to turn a wrench for a living. I had bigger plans. I wanted to be the guy designing the machines that I had grown up working on. After graduation in 2010, I enrolled at Allan Hancock College. I wasn't in a rush to move across the country in search of independence; I had a tight knit circle of friends and was content living with my parents. I breezed through my first semester and was a few weeks into the second when life changed.

My mother sat me down and dropped two bombs on me. They were losing the only home I've ever known and divorcing. I wasn't angry with them - they were loving parents that gave me their best. My father moved a few hundred miles away, my mother moved into a one-bedroom apartment across town. They knew I was resourceful and would figure things out - that has always been my strong suit. I made peace with the situation, dropped out of school, and found a place with my brother. I worked tirelessly - delivery pizzas, selling used restaurant equipment, installing windows; anything to keep the bills paid. The only thing that soothed the bitterness of having the rug pulled out from under me was the hunger to prove myself. My employers seemed to appreciate that - I found myself in management at age twenty. I was so proud to have shown the world, "I don't need other people or an education to be successful!" At least, that's what I kept telling myself. There was an emptiness growing in me. I enjoyed my job and my coworkers but I wasn't passionate about what I was doing. The sting of employing college kids pursuing their dreams couldn't be ignored. In 2017, I became a shift manager at the local casino and was assigned to work graves. That's when I decided to finish what I had started.

I started slowly at first but quickly gained momentum. Two classes per semester turned into three, then four, then six. I slept in my car after work in the school parking lot, showered at the gym before going back for another shift, pushed myself further than I thought possible. My fierce desire to become an engineer didn't diminish - it grew stronger. I loved my classes and my grades proved that. I landed on the Dean's List for the last three semesters, despite all odds. I began tutoring part time to share my passion for knowledge with those needing a hand. I worked outside of class in engineering projects and independent studies. The more I threw myself into school, the more it gave back - NSF grants, tech scholarships, staff going out of their way to support me and my dream. Without them, I wouldn't have made it as far as I have.

I recently got accepted into my dream school, Cal Poly, for mechanical engineering. I will be pursuing a master's degree and have every intention of using my education to help people. My wife, the most patient and supportive person I have ever met, has battled chronic pain for over a decade. I find small ways to make life easier for her at home, thanks to 3D modeling and printing. I share my designs for free - anyone can print them at home. When a user on the other side of the world thanked me for helping his 85-year-old dad, something clicked. *That* is what I want to do with my life. My passion for engineering will be dedicated to those with struggles. I hope to guide others that feel defeated, out of options, or that the world has conspired against them. I hope my story inspires somebody to not give up on their dream. I hope to make every person that has supported me proud of their investment.

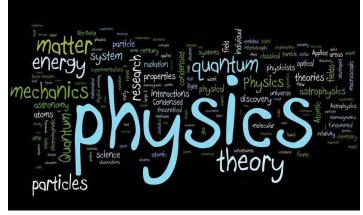
This tough chapter of my life is halfway over and I see a bright future ahead. I picture myself taking my son, who's just a few weeks old now, to school in a car we work on together. I can't wait to spend weekends with my beautiful wife, making up for lost time. Ultimately, I see myself in the career that I was meant for - making the world shine just a little bit brighter.

How to Improve Your Odds of Passing My Class (or any intense STEM class for that matter)

by Rob Jorstad, Physics Instructor

Students commonly inquire what the "secret" is to passing my classes each semester. Unfortunately, there is no "secret!" The trick is to do the work, follow the steps I outline on my syllabus/Canvas, and stay disciplined. You want to know how to pass? These steps work for my students every year:

- Get a study partner or small group (2-3 others)
 - This improves efficiency and reduces that feeling of "why am I doing this?"
- Make a study plan (10 hours a week OUTSIDE of class)



- Think of those outside hours like a job and commit to them
- \circ $\,$ 10 hours per week is MUCH better than 50 hours every 5 weeks
- o Grind out as many problems as you can on schedule
- Wean yourself off the solutions (do 1 or 2 problems with solutions, then try without)
- o Ask me questions about specific steps in the solutions which don't make sense
- Budget an extra 10 hours to do at least 3 practice tests approximately every 5th week
 - Time yourself (2 hours)
 - Do not use solutions during testing
 - Grade yourself afterwards (about an hour)
 - Don't cry when you completely fail the 1st one...it will get better by the 3rd (stay positive and work hard)

Final note: If you think you can "lone wolf" it, please try to meet others and give it a shot. Personally, my grades went way up after I started having a partner. The extra effort spent on coordinating meet-ups is more than offset by the reduction in feelings of isolation and efficiency (e.g. your partner/group helps you spot stupid mistakes that normally eat up the clock when flying solo). Another group style you might like: I talked to another colleague who said they would do all their work on their own but at least had a partner "on call" for the occasions when they got really confused/stuck.

And REALLY IMPORTANT – come to my office hours regularly!



A Product of Two Communities – Worlds Apart

by Keren Chi, MESA Student, Biology

I immigrated to the U.S. when I was 11 years old due to violence that threatened my life and my mom's. As a child, news of violence was constant. I felt scared of being sexually assaulted like some of my schoolmates. The violence in my neighborhood was always rising, and my grandmother had to pick me up from school because I was being harassed by some girls who wanted my homework. My immigration to the U.S. was not only dangerous, but also exposed me to different cultures and variations of languages.

After my long journey to the U.S., by foot, by sitting on top of trains, and thirdclass buses, I came to face the American culture and the Mexican culture all at once. The English language was one of my barriers, but even my first language, Spanish, made me different and unlikeable. My peers consider me different; in some ways, I was. I did not belong to the American or Mexican culture. But my struggles and lack of support coming from my peers only made me stronger and ultimately helped me to strive to overcome my obstacles. During my freshman year at Righetti High School, I was struggling with my reading scores, but I never gave up. I saw my failures as an opportunity to try different strategies and improve on what I did well. My hobby became reading dictionaries and testing my general knowledge. I spent my sophomore year using my free time reading and learning new words. I found support in books, and I was determined to learn English and achieve more academically. Due to our recent immigration, my mom and I had to move to different places. We lived in a room with my



uncle, then in a garage and finally in an apartment. Each time we moved, my time was limited. The few hours I had during the day were used to correct my past English tests.

After learning English, the time to choose my major came. I considered it an opportunity to make a change for me and those I met in the past. I remember Tiny Buddha's quote that says, "As one person I cannot change the world, but I can change the world of one person." I grew up watching how other children at my age would become sick and die due to poverty. Most families in Honduras could not afford treatment for the Chikungunya virus transmitted by mosquitoes. My cousin, who I consider my brother, survived the chikungunya virus, but he still has health issues. After I came to the U.S., I decided to pursue a medical career in which I can help others like my brother and other children. I want to learn more about viruses transmitted through mosquitoes and eventually become a pediatrician. This is the reason why I am now majoring in biology, with the purpose to learn more about how the world around me works and to have a chance to pass the MCAT and go to medical school.

At the beginning of the year, I was uncertain if I was taking the right classes to achieve my dreams, and MESA and the EOPS programs supported me by walking me through the process of applying for scholarships and helped me to stay on track during quarantine. I hope to be a role model for my younger siblings and be helpful to the children in my community who will need medical attention in the future. As I reflect on where I came from, I feel that I am a product of two communities that are a world apart.



A Note from Our Dean

by Dr. Sean Abel, Dean of Academic Affairs, STEM

As we move toward the Fall 2021 semester, I wanted to let you know how glad we are to have you here at Allan Hancock College! You are working to earn degrees and transfer in fields with careers that have futures with infinite possibilities. As we emerge from the restrictions of the COVID pandemic, the Allan Hancock College MESA/STEM Center is the welcoming and nurturing place to help you continue your successes regardless of your learning modality. It is the hope of all of the administrators here at the college that you will be attending all of your classes on campus. Of course, we cannot know the future and how changes in the global, national, state, and local health situation will impact our ability to be together; please rest assured that the campus community is doing everything it can to help you achieve your educational goals in any teaching and learning environment.

Thank you so much for making Allan Hancock College a part of your higher educational experience. We're glad you're here!

If Engineering Were Easy, Anyone Would Do It

by Gerardo Hernandez, MESA Student, Civil Engineering

Before going to Allan Hancock College, I had realized that engineering was a perfect choice, and I was going to pursue civil engineering. This choice came because my family and I traveled every year to Mexico by car. During this 32-hour trip, I was fascinated with the intricate designs of various bridges we would pass as well as the designs for roads. In high school, I was involved in various STEM related coursework such as physics, drafting, programming, and SolidWorks. I knew that all these different classes were related to engineering, and I was interested in the material presented. My drafting teacher in high school had also done a presentation of the various engineering branches, and civil engineering mostly caught my interest. I made sure not to waste time once I began college, and I was determined to pursue civil engineering.



During college, I have been a very disciplined student by putting

schoolwork over extracurricular activities. There have been various times I have canceled plans with friends to finish an assignment or study. My dedication to school allowed me to have been on the Dean's list fall of 2017 and fall of 2018. Despite putting most of my time in school, I still wanted to squeeze in getting involved with the college. I am a former member of the Alpha Gamm Sigma Honors Society and I have helped with Food Share Because We Care, Bulldog Bow Wow, and Midterm First Aid. I also decided to work as a student ambassador to gain the leadership roles necessary for the engineering workforce. The only thing I regret about my time in college is not joining MESA sooner! I joined MESA my second year in college and have taken advantage of all the resources they provide their students. I have even spent most of my days in the MESA Center studying, eating, and even sleeping between classes. I can say that this program has been a big part of my success in college, and I am glad that I made the decision to join. Even if Covid-19 has made it difficult to learn, MESA continues to help students the best way they can.

I understand that engineering is not an easy career or inexpensive to pursue but the outcome will be amazing. My father always told me, "if engineering were easy, anyone would do it", which inspires me to prove myself wrong and show that I can become an engineer despite how difficult it may get. There will be bumps on your own journey but just have a futuristic mindset and know it will be worth it in the end. Fortunately, I have been accepted to Cal Poly, San Luis Obispo and I will begin Fall 2021. I plan to complete my bachelor's degree in civil engineering to be involved in modern bridge designs while also inventing ways to make traveling safer and more efficient.

It's Okay to Fail, Just Keep Getting Back Up and Work Harder

by Ruth Amaya, MESA Student, Environmental Engineering



I have never been that prototypical student that excelled academically. In high school, I didn't give much thought to college or what I wanted to do after high school. I skipped classes and missed tests, thinking my education wasn't worth it. That led to me working many jobs until I realized that I wanted to do something that could make a difference in the world; something positive and that I am passionate about. I decided to attend college with no idea what I wanted to study. I talked to many counselors back in Texas, and I decided to settle with an education major. One day, I was walking around campus and I saw this separate building and decided to look inside. Interestingly, I saw a group of female students working with different types of equipment. A lady approached me and started to ask me questions and began to show me around the STEM building. She started to talk to me about STEM and all the different majors and I immediately responded to her, "That's not for me. I'm not smart enough. I barely passed high school." To my surprise, she expressed that she had gone through the same thing. She assured me that it's not about how smart you are, but more importantly, how hard you're willing to work for it.

I did some research and learned about Environmental Engineering. I started to listen to interviews and read articles, and I began to get excited about the idea of one day becoming an engineer in this field. It hasn't been easy, and I am not the best student, and I am still learning how to better my study skills and time management. Last semester was a wake-up call when things didn't go according to plan. I felt a bit discouraged and even questioned if I should continue to pursue this dream of mine. However, talking to Christine and other stellar people made me realize that we are not alone. We have so many resources and people on our side. We just need to look for it or ask for help, which isn't as easy as it sounds. There are still things I am trying to overcome, whether it's asking questions in class or even utilizing tutoring services, we cannot improve without asking for help.

Life happens, issues arise, and you cannot change that. What matters is how you decide to move forward and change your future. I'm still trying to remind myself that it's okay to fail, just keep getting back up and work harder.

Preventing and Managing Burnout

Burnout: noun

- 1. the reduction of a fuel or substance to nothing through use or combustion.
- 2. a state of emotional, physical, and mental exhaustion caused by <u>excessive and prolonged stress</u>

Physical Symptoms:

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Insomnia

Chronic fatigue

Increased illness

Loss of appetite

Forgetfulness/impaired

pain, heart palpitations,

concentration and attention

shortness of breath, dizziness,

Physical symptoms – chest

headaches, stomach aches

Emotional Sings/Symptoms:

- Anxiety, depression, anger
- Loss of motivation
- Feeling helpless, trapped and defeated
- Sense of failure and selfdoubt
- Detachment, feeling alone from the world
- Decreased satisfaction and sense of accomplishment

Behavioral Symptoms:

- Withdrawing from responsibilities
- Isolating yourself from others
- Procrastinating, taking longer to get things done
- Using food, drugs, or alcohol to cope
- Taking out your frustrations on others
- Skipping work or arriving late and leaving early

Managing Burnout

- Take some rest
- Take inventory make a list of situations that cause stress, anxiety, worry, frustration, hopelessness – don't rush developing the list
- Evaluate how to modify the situations to reduce stress, implement, and remodify if needed
- In recovery, say NO to any new commitments
- Socialize
- Control your gadgets
- Lessen the workload
- Reduce the need for perfection
- Delegate, delegate, and delegate again
- Stay committed to basic maintenance
 - Sleep 6-8 hours
 - Eat well and regularly; Drink H2O
- Seek support, reach out to your support network

Source:

https://www.helpguide.org/articles/stress/burnoutprevention-and recovery.htm



How I Ended Up Here

by Aleyda Bautista, MESA Student, Chemistry

My name is Aleyda Bautista and I'm a chemistry major. I know what you're thinking, "why chemistry?!?" A majority of people seem to really dislike chemistry for its difficult and confusing nature. That, I can completely understand, but there were several reasons as to why I decided to major in chemistry. It wasn't until I took my first chemistry class that I fell in love with it. To me chemistry came easily and while all my friends hated it, I completely loved it. Chemistry to me was like solving some kind of puzzle and as I learned more I felt like I had found something I was good at and passionate about. I decided to take AP chemistry and, although tough, I enjoyed the challenge. During my junior year when I was taking AP chemistry my teacher passed away and so the second half of the year was filled with challenges adjusting to a new teacher. Senior year came and I wanted to go straight to a four-year university, but due to financial issues, my family and I decided it would be best to attend Hancock.



I came to Hancock wanting to be a chemical engineer, but after my first semester I

switched to just a chemistry major. My first semester I didn't do as well as I expected. I think the main reason for that is that I had never needed to study and did not have good study. I thought it would be the same as high school, which was really naïve of me. My second semester was much better as I had learned what study habits worked for me. I met with Angelica, STEM Counselor, and was encouraged to apply to MESA and Bridges to the Baccalaureate. I applied to both programs and was accepted. Through Bridges I was able to be part of a paid research internship at Cal Poly SLO in an organic chemistry lab. This internship gave me insight to what research is and I absolutely loved it. This allowed my love and passion for chemistry to grow and made me think about pursuing a doctorate degree. Through MESA I was able to get access to tutoring for my tougher classes and also meet a lot of friends and peers who knew what it feels like to struggle. My second year at Hancock was filled with challenges and tough times mentally which ultimately caused me to not pass a class. While that was a hard experience since I had never failed, it taught me that it's okay to fail and that life is filled with ups and downs.

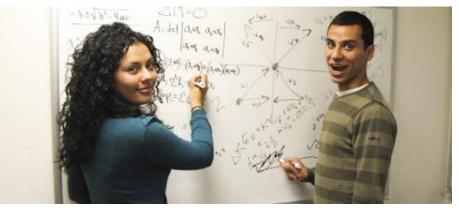
Now here I am finishing my third year at Hancock. I'll be transferring this fall. While it's also been hard due to remote learning I feel as though I've adjusted. It's definitely been a challenging year not only for me but so many of my peers. I honestly don't know where I want to go in life. As a first-generation college student there's a bit of pressure on being the first in my family to get a college degree. I want to pursue my doctorate degree for myself and to make my parents proud, but also do so many other things such as teaching or working in the industry. Working in an environmental lab has given me a perspective of what that's really like but there's so many things to do in the chemistry field. Life is full of unexpected things and as much as I plan my future, I truly don't know where I'll end up. I just know that I'm passionate about what I'm studying and that it's okay to fail and stumble through life.

Spring 2020 MESA/STEM Activities

Jan 22, Jan 29, Feb 5—UCSB-Smithsonian Scholars Program Information Session (10am & 5pm; Zoom -820 1474 0384) Feb 3—Financial Aid and Scholarship Workshop (3:30pm-4:30pm; Zoom Link-976 9930 2444) Feb 5—Financial Aid and Scholarship Workshop (1:00pm-2:00pm; Zoom Link-976 9930 2444) Feb 17—Internships Opportunities & Strategies Workshop (3:30pm-4:30pm; Zoom Link-976 9930 2444) Feb 19—Internships Opportunities & Strategies Workshop (1:00pm-2:00pm; Zoom Link-976 9930 2444) March 5—Recognizing and Managing Burnout Workshop (1:00pm-2:00pm; Zoom Link-976 9930 2444) April 16—You're Outta Here Workshop* (1:00pm-2:00pm; Zoom Link-976 9930 2444) May 7—MESA/STEM Student Achievement Celebration 2021 (4:00pm-6:00pm; Zoom Link-969 3660 2580) May 14—You're Outta Here Workshop* (1:00pm-2:00pm; Zoom Link-976 9930 2444)

The Mathematics, Engineering, Science Achievement (MESA)

Program is an academic program that provides a wide range of support services and activities aimed at fostering student achievement and increasing the success and participation



they experience while pursuing a degree in mathematics, engineering, computer science, biology, architecture, kinesiology, or other science-based programs. MESA enables students to prepare for and graduate from a four-year university with a math-based degree. It also seeks to increase the diverse pool of transfer-ready community college students who are prepared to excel as math, engineering and science majors. Through the program, students develop academic and leadership skills, increase educational performance, and gain confidence in their abilities to compete academically and professionally.

Visit our website at www.hancockcollege.edu; click on MESA under Quick Links

